(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 1 227 007 A3

(12) EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
03.03.2004 Bulletin 2004/10

(43) Date of publication A2:
31.07.2002 Bulletin 2002/31

(21) Application number: **02001676.2**

(22) Date of filing: **24.01.2002**

(51) Int Cl.[7]: **B60R 16/02**

(84) Designated Contracting States:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR
Designated Extension States:
AL LT LV MK RO SI

(30) Priority: **25.01.2001 JP 2001017182**

(71) Applicant: **Denso Corporation**
Kariya-city, Aichi-pref., 448-0029 (JP)

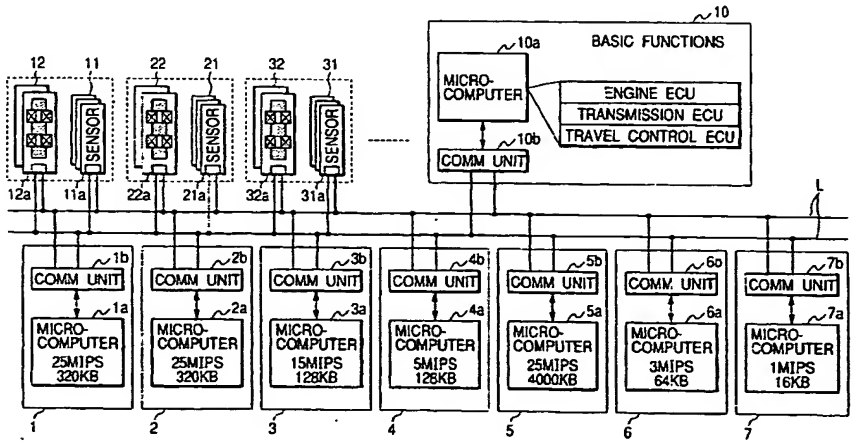
(72) Inventors:
- **Suganuma, Takeshi**
  Kariya-city, Aichi-pref.448-0029 (JP)
- **Fujii, Yoshimitsu**
  Kariya-city, Aichi-pref.448-0029 (JP)

(74) Representative: **Pellmann, Hans-Bernd, Dipl.-Ing.**
Tiedtke-Bühling-Kinne & Partner GbR,
TBK-Patent,
Bavariaring 4
80336 München (DE)

(54) Fail-safe system and method in integrated control of vehicle

(57) A fail-safe system (Fig.2) used in integrated control of a vehicle includes structural-element control portions. Preset priority degrees are given to the structural-element control portions, respectively. A manager control portion (10) stores one or more substitute programs designed to implement functions of ones among the structural-element control portions which are necessary for travel of the vehicle. A downloading device operates for, when one of the structural-element control portions which is necessary for travel of the vehicle fails, selecting one from non-failed ones of the structural-element control portions as a download destination in accordance with the priority degrees and downloading the substitute program corresponding to the failed structural-element control portion into the selected download-destination structural-element control portion. The selected download-destination structural-element control portion is lower in priority degree than the failed structural-element control portion. The download-destination structural-element control portion serves for the failed structural-element control portion according to the downloaded substitute program.

FIG. 2



EP 1 227 007 A3

European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 02 00 1676

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	US 5 957 985 A (LEE LAWRENCE W ET AL) 28 September 1999 (1999-09-28) * the whole document * ---	1-17	B60R16/02
A	US 4 532 594 A (OSHIAGE KATSUNORI ET AL) 30 July 1985 (1985-07-30) * the whole document * -----	1-17	

TECHNICAL FIELDS SEARCHED (Int.Cl.7)

B60R

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
MUNICH	8 January 2004	P. Brachmann

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
O : non-written disclosure
P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document

EPO FORM 1503 03.82 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 02 00 1676

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

08-01-2004

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5957985 A	28-09-1999	EP 0942849 A1	22-09-1999
		JP 2001506789 T	22-05-2001
		KR 2000057625 A	25-09-2000
		WO 9826958 A1	25-06-1998
		US 2001041956 A1	15-11-2001
US 4532594 A	30-07-1985	JP 1400635 C	28-09-1987
		JP 58010246 A	20-01-1983
		JP 62009934 B	03-03-1987
		CA 1194236 A1	24-09-1985
		DE 3226195 A1	10-02-1983
		GB 2104247 A ,B	02-03-1983

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82